

ABSTRACT

An automatic gain control apparatus and method that acquires current position of its own station at the start of communication to calculate the communication distance
5 from a communication partner station and sets an initial value for gain of its variable gain amplifier based on the calculated communication distance. The automatic gain control apparatus according to the present invention comprises a variable gain amplifier 101 that amplifies the
10 received signal with set gain; a current position acquiring section that acquires current position of its own station at the start of communication; a receive power estimation circuit 105 that calculates the communication distance from the communication partner station based on the acquired
15 current position of its own station and estimates the receive level of the received signal at the start of communication based on the calculated communication distance; and an initial value setting circuit 104 that sets an initial value for the gain based on the estimated
20 receive level of the received signal.